

Citation for published version:

Regan, Á, Marcu, A, Shan, LC, Wall, P, Barnett, J & Mcconnon, Á 2015, 'Conceptualising responsibility in the aftermath of the horsemeat adulteration incident: an online study with Irish and UK consumers', *Health Risk & Society*, vol. 17, no. 2, pp. 149-167. <https://doi.org/10.1080/13698575.2015.1030367>

DOI:

[10.1080/13698575.2015.1030367](https://doi.org/10.1080/13698575.2015.1030367)

Publication date:

2015

Document Version

Peer reviewed version

[Link to publication](https://doi.org/10.1080/13698575.2015.1030367)

The Version of Record of this manuscript has been published and is available in *Health, Risk and Society* May 2015, via <http://www.tandfonline.com/10.1080/13698575.2015.1030367>

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

**Conceptualising responsibility in the aftermath of the horsemeat adulteration incident:
An online study with Irish and UK consumers**

Áine Regan ^a, Afrodita Marcu ^b, Liran Christine Shan ^a, Patrick Wall ^a, Julie Barnett ^c, &
Áine McConnon ^a

^a School of Public Health, Physiotherapy, & Population Science, University College Dublin, Ireland, ^b Food, Consumer Behaviour and Health Research Centre, School of Psychology, University of Surrey, Guildford, United Kingdom and ^c Department of Health Psychology, University of Bath, Bath, United Kingdom

Running Head: Conceptualising responsibility

Address for correspondence: Áine Regan: Email: aine.regan@ucd.ie

Abstract

Understanding how consumers react to what is happening as a crisis evolves is crucial for those charged with risk management and risk communication. Responsibility, blame and accountability are important concepts in any crisis, particularly when consumer confidence has been damaged. In this article we examine to what extent, and to what effect, responsibility, blame and accountability figure in consumer reactions in the immediate aftermath of a food crisis. The data we draw on in this article is derived from an online engagement study which took place in ‘real time’ as the crisis unfolded. Through this study we were able to explore how consumers responded to the adulteration of processed beef products with horsemeat in early 2013 in Ireland and the UK. We found that consumers attributed causal responsibility and allocated blame for the adulteration to three factors, the deliberately deceitful practices of the food industry, the complexity of the food supply chain, and demand from (other) consumers for cheap food. We found that consumers were willing to begin the process of rebuilding their confidence in the food system and accountability was viewed as the primary means for restoring confidence.

Keywords: risk, accountability; blame; horsemeat; food adulteration, responsibility; risk communication, VIZZATA™

1 Introduction

2 Food scares can damage consumer confidence in food safety: in particular in the safety and
 3 quality of the food supply; the food industries' commitment to produce safe food; and the
 4 regulators ability to police the food chain (Houghton et al., 2008). This loss of confidence can
 5 result in consumer reactions that are not justified by the public health risk, fuelled by feelings
 6 of deceit and betrayal by stakeholders in the food chain, sensational media coverage, and the
 7 associated political response (Kasperson, Jhaveri, & Kasperson, 2001). If consumer health is
 8 to be protected and minimal damage done to consumer confidence, appropriate communication
 9 strategies are required from the stakeholders involved (Grunert, 2002). This requires an
 10 understanding of consumers' concerns to target communications accordingly. Currently there
 11 is limited understanding of consumers response to information in times of a food crisis and in
 12 this article we contribute to this understanding by examining how consumers in Ireland and the
 13 UK responded in 'real time' to the 2013 horsemeat adulteration¹ incident. In this article we
 14 explore how consumers conceptualised responsibility, blame, and accountability – particularly
 15 important concepts to consider when consumer confidence is threatened.

17 Food crises and risk

18 *Conceptualising causal responsibility, blame and accountability*

19 Crises are often characterised by the heavily politicised responses and are marked by
 20 discussions over what caused the crisis, who is to blame for allowing this happen, how the
 21 different parties involved reacted, and what reparatory actions are required (Boin, Hart,
 22 McConnell, & Preston, 2010; Rowe, Hawkes, & Houghton, 2008; Seeger, 2006). Researchers

¹ We use the term 'adulteration' in the current study to reflect a distinct food risk, growing in recognition and concern, which involves the intentional substitution or addition of a substance in a food for economic gain (Spink & Moyer, 2011). In contrast, food safety contamination incidents involve unintentional acts with unintentional harm. Where the word contamination is used in the current paper, we use this in the general sense of something being made impure or unclear by contact or mixture.

investigating concepts of responsibility and blame in a crisis have tended to focus on how the media construct stories through the lens of blame and responsibility (Kuttschreuter, Gutteling, & de Hond, 2011) or the organisational response strategies chosen (Benoit, 1995; Greenberg & Elliot, 2009; Lachlan & Spence, 2010; Moynihan, 2012). There has been little empirical investigation of how consumers conceptualise responsibility and attribute blame in the aftermath of a crisis. This is not surprising given the limited conceptual clarity in the use of the cluster of related terms including ‘being responsible’, ‘being to blame’ and ‘being accountable’. These terms are often used interchangeably despite evidence to suggest that although related, they are conceptually independent (Bickerstaff, Simmons, & Pidgeon, 2006; Schlenker, Britt, Pennington, Murphy, & Doherty, 1994). In this article we aim to identify the distinguishing features of these concepts (causal responsibility, blame, and accountability) and investigate how they figure in consumer reactions in the immediate aftermath of a food crisis.

Individuals attribute causal responsibility to actors or objects when they identify them as contributing to the occurrence of the event (Bickerstaff et al., 2006). It is possible to identify various ways in which consumers can attribute a causal role to individuals and organisations during a food crisis. Consumers can hold certain individuals or organisations causally responsible for an event or see them as causally contributing to the event by the actions they take or fail to take (Schafer, 1999). Consumers can see these individuals or organisations as ‘complicit’; as Busby argues not as primary agents but as contributors:

the involvement that various groups have in the generation of a risk, not as primary agents, nor as the notional risk managers, but as people whose action in some way contributes to the risk” (Busby, 2008, p. 1571).

Thus consumers may look beyond those directly responsible for an event attributing responsibility more widely across a range of individuals and organisations.

When individuals attribute blame to specific individuals and organisation they judge that not only did these individual and organisation through their actions or inactions contribute to the events but they should have prevented the event (Uzzell, Vasileiou, Marcu, & Barnett, 2012). Thus the attribution of blame involves a moral judgement. Such judgement is based on an assessment of whether the individuals or organisations whose actions or inactions contributed to the adverse event could have foreseen the consequences of their (in)actions or could have acted in different ways. Furthermore, the action must have been carried out with intention and under free will (Bickerstaff & Walker, 2002; Uzzell et al., 2012). The concept of blame is particularly important in relation to risk and disaster. Implicit in the definition of blame as a moral judgement is an understanding that risk is ‘man-made’. Green (1999) argues that society increasingly views accidents and disasters as preventable events rather than unpredictable and random, thus, when a disaster or risk does arise, then someone must be to blame and held accountable. Douglas in her seminal study of cultural theory (1992), also highlighted the centrality of a ‘new blaming system’ in society: when a disaster occurs, individuals or groups will respond by allocating blame in such a manner to protect their own worldview. There may be a tendency to assume that in times of a crisis, considerations of responsibility will always result in negative attributions. However, a broader view of moral responsibility posits that an actor judged to be morally responsible for an event with desirable or positive outcomes will garner gratitude, respect and praise (Fischer & Ravizza, 2000).

A food scare can be seen as a ‘fateful moment’, one which challenges taken for granted assumptions that food is safe and stimulates reflection on every-day activities such as eating practices based on habit (Eden, Bear, & Walker, 2008). The news that BSE (Bovine Spongiform Encephalopathy), a disease of cattle, could spread to humans as variant

Creutzfeldt-Jakob's disease challenged consumers assumptions that eating beef was safe and highlighted 'modern-farming' techniques in which herbivorous cattle were fed bovine meat and bone meal (Setbon, Raude, Fischler, & Flahault, 2005; Washer, 2006). Such food scares undermine consumer confidence in the nature and production of food and in different participants in the food chain such as retailers, food producers, and food regulators (de Krom & Mol, 2010). When confidence is undermined, for example when consumers are made aware that labels on food packages do not accurately reflect the contents of the package, then they expect remedial action such as apologies, reparations, sanctions or penalties. Such action can reassure consumers that failure of food processing systems is not inevitable, but rather preventable and remediable (Driedger, Mazur, & Mistry, 2013; Irani, Sinclair, & O'Malley, 2002; Moynihan, 2012).

In this article we focus on how consumers identified those actors they felt should be answerable for their actions (or inactions) relating to the horsemeat adulteration incident. Being viewed as accountable need not always go hand-in-hand with attributions of causal responsibility and blame (Schafer, 1999). For example, organisations which have a role, or duty, to oversee the activities of other organisations, including food safety agencies, regulatory bodies, certifying authorities, might be held accountable instead of the organisations directly involved in an incident. Closely linked to the concept of accountability is that of 'role responsibility' – a term denoting a duty or obligation, where an individual or organisation, because of their social position, are legally or morally obliged to take a certain course of action in the face of a given event (Uzzell et al., 2012). Schafer (1999) and Schlenker et al. (1994) have argued that that ideas about duties and obligations play a key role in considering what actors are accountable. Schafer (1999) notes that the responsibilities associated with an individual's occupation or profession may influence consumers' considerations as to their

accountability when considering what went wrong in the event of a breach in food safety or quality, and to offer means for solving, resolving, dissolving, or expiating the breach.

The 2013 horsemeat adulteration incident

On the 15th January 2013, the Food Safety Authority of Ireland announced that frozen beef burgers on the Irish market had tested positively for pig and horse DNA. These initial tests revealed predominantly trace levels of horse (and pig) DNA contamination, although, one burger was found to contain 29 per cent horse DNA. In the weeks and months which followed, a pan-European problem was uncovered as further testing identified processed beef products fraudulently adulterated with horse meat in many Member States. Investigations within several European Union Member States were immediately initiated to determine who was responsible for this widespread adulteration, an arduous task given the complexity of the food chain.

In this article we examine whether and how considerations of responsibility featured in consumers' reactions in the early days of the 2013 horsemeat scandal as details gradually came to light and various individuals and organisations were implicated. We chose to examine the views of Irish and UK consumers specifically, as the study took place in the early weeks of the incident at which point the contaminated products had only been found in the Irish and UK market. We explored consumers' attributions of responsibility early in the unfolding of the incident in order to identify their intuitive strategies of sense-making around concepts of responsibility in a context and at a time that was characterised by uncertainty as to where the responsibility lay.

Methodology

Design

In this article we draw on a study of ways in which consumers in Ireland and the UK developed an understanding of the events associated with the 2013 horsemeat adulteration incident. Most studies of consumer responses to events such as food incidents are based on survey designs using interviews or questionnaires. Such surveys provide snapshots of consumer reactions at a specific time but do not allow for interaction or dialogue between the researchers and the participants. To overcome such limitations we used an approach that facilitated a degree of dialogue and interaction. We employed VIZZATA™, a web-based software developed to explore citizen engagement and deliberation in the form of an asynchronous dialogue between online participants and the research team (Barnett et al., 2008; Marcu et al., 2014). The platform enables researcher present study materials (text, images, audio, or video) to participants who are invited to ask questions and make comments. These questions and comments are sent to and read by the research team who respond individually, engaging the participants in an asynchronous exchange. Participants re-enter the online platform for a second phase of the study and have the opportunity to comment further on the responses they receive. During this two-way exchange, the participants are able to deliberate about the content presented to them as well as engaging in commenting, seeking clarification and contextualising or challenging the communications.

A previous study employing VIZZATA™ to investigate the views of dieticians towards low-calorie sweeteners found that the online platform helped to elicit participant views in a less demanding environment; not in response to direct questioning and with the anonymity afforded by the online individual environment. (Harricharan, Wills, Metzgar, de Looy, & Barnett, 2014). Alternative qualitative methods such as focus groups have the disadvantage that participants deliberate not only in response to stimulus material but also in response to the voiced opinions of others in the group, and the risk is that more articulate participants can set the tone of the discussion or influence others' responses. Focus groups are also conducive to 'group think',

and the convergence of opinions (sometimes under the influence of social norms pertaining to conversation) may obscure individual views. Another study which employed VIZZATA™ to investigate consumers views of synthetic meat found that participants were less likely to engage in question-asking in the focus group setting than in the individual VIZZATA™ setting, perhaps because there is a tendency for opinions to converge in a group setting (Marcu et al., 2014). By contrast, VIZZATA™ is well positioned to elicit consumers' specific questions and thoughts in response to significant communications as it allows participants the space to focus on the content of the communication presented rather than on interpersonal exchanges and opinions of peers.

We started the study soon after the start of the horsemeat incident, when consumers were being exposed to information from sources that were attempting to explain the incident. We wanted to capture the consumers' process of sense-making by creating a platform mirroring as closely as possible the way consumers might naturally digest information. By employing VIZZATA™, we were able to deploy the study quickly and to present participants with multiple media formats such as YouTube videos, newspaper article extracts, press release texts, website screenshots and images. We presented study material in authentic formats that should seem credible to participants and stimulate more engagement with the content (Rutsaert et al., 2015). The 'asking questions and posing comments' features of VIZZATA™ ensured we could capture the participants' immediate thoughts and emotional reactions vis-à-vis the incident.

Study materials

Content testers When participants enter the online VIZZATA™ platform, they are presented with a series of *content testers*, that is information in bite-sized chunks, which can take the form of text, images, audio, or video. The participants have the option to respond to the study material as they read it by clicking the 'Ask a question' and/or the 'Make a comment' buttons

at the bottom of each content tester page. We gave participants five content testers in Phase One of the study. These testers included the original Food Safety Authority of Ireland press release from 15th January, an update from the UK Food Standards Agency from 18th January, an overview of the media reports on the incident, a YouTube video of the Irish Agriculture Minister explaining the incident, and a public apology from a supermarket implicated in the adulteration which had been issued on 16th January. In Phase Two, a week later, a single content tester provided an update on the latest developments. The text of the content testers is available from the corresponding author.

We chose content testers to represent a variety of authentic and significant communications related to the horsemeat incident circulating in the public domain at the time. We decided on the content testers in consultation with the whole research team who are all authors of this article. We chose content testers to reflect the main themes being communicated publicly and the main stakeholders communicating in the public sphere at the time. Whilst the information in the content tester provides a frame for responses, its main value is eliciting participants' own comments and questions in response to the content rather than, as is often the case in survey research, simply seeking answers to questions. Although framing is an issue with all types of studies (for example questionnaires frame the type or range of responses, while focus groups frame the responses in line with social norms and group dynamics), we acknowledge that there is more explicit framing in the current study with the use of stimuli such as the content testers but we view this as a parameter of the current study, rather than a limitation.

We employed multiple content testers (using multiple formats), which presented a broad display of perspectives from various stakeholders communicating during the horsemeat incident. These were real communications which were available in the public domain and which consumers could use to make sense of the incident in the context of their everyday lives.

Contrary to user-generated data on social media such as tweets or online comments, a VIZZATA™ study enables us to capture consumers' reactions as responses to specific, structured, online content rather than as reactions to other consumers' views (see Regan et al., 2014 for a detailed discussion of consumers' online comments as a source of data). With user-generated data online, the profile of those commenting is generally unknown or cannot be reliably verified; in contrast, the VIZZATA™ study enabled us to recruit participants in a systematic way and to obtain verifiable demographic information.

Open-ended questions The VIZZATA™ platform also provides the facility to ask participants open-ended questions. Following the presentation of the content testers, Phase One of the study ended with following five open-ended questions:

- *Is there anything worrying about this incident?*
- *In what ways, if any, do you think this incident has been well managed?*
- *In what ways, if any, do you think this incident has been poorly managed?*
- *Has this incident made any difference to how confident you are about what is in your food?*
- *Do you have any more thoughts or comments on this topic?*

In Phase Two we also used the facility asking participants how their understanding of the event had changed as a result of taking part in the study and how they felt the issue had been managed by the authorities in Ireland and the UK. The open-ended questions which followed the content testers provided us with an opportunity to obtain some more structured reflections on conceptual issues of interest including: perceptions of a risk; public appraisal of risk management approaches; and the potential for lasting impacts of a crisis event (such as

impaired confidence in food supplies). These issues guided our construction of the open-ended questions and ensured we captured a comprehensive overview of how consumers were reacting to the incident. We used wording which was neutral and non-directional so as to avoid framing responses.

Participants

To ensure timely recruitment of participants, we used an international recruitment agency which specialised in online research (Toluna). Participants were recruited from their national online panels of participants, who had never before been involved in a VIZZATA™ study. Toluna employs panel quality-control measures (see <http://www.toluna-group.com/about-toluna/about/data-quality-approach>). To allow for non-completion rates, 60 potential participants were approached: 30 from the United Kingdom and 30 consumers from the Republic of Ireland. These participants were identified from the online panel using a screener questionnaire which ensured that they met the inclusion criterion of consuming red meat on a regular basis. The profiles of the 44 participants who completed the study are in Table 1. It is possible that the views of some social groups are under-represented in the current study; for example, we do not have information on the socio-economic background of our participants. As this is a qualitative investigation, we did not seek to obtain a representative sample of the general population in Ireland and in the UK; we sought to carry out an in-depth investigation of the range of opinions and responses consumers had in the early days of the horsemeat incident.

<Insert Table 1 about here>

Procedure

244 Our study went live on the 19th of January; four days after the initial Food Safety Authority of
 245 Ireland press release on the horsemeat incident. Upon receiving a list of eligible participants
 246 from the recruitment agency, we invited the 60 participants, via email, to the website hosting
 247 the VIZZATATM tool. Participants were well informed at all stages of the study, starting with
 248 an e-mail which explained who we were, a short description of the study topic, and an
 249 indication of the study format, before inviting participants to take part. Upon entry into the site,
 250 the participants were presented with an introductory page explaining the nature and purpose of
 251 the research in detail. The voluntary nature of the study was emphasised and participants were
 252 asked to provide informed consent by ticking agreement before proceeding into the study itself,
 253 where they were presented with a sequence of 5 content testers. Phase One of the study closed
 254 on the 21st January and over 22nd and 23rd of January, the first, second, and third authors
 255 responded to the individual comments and questions. Similar questions and comments were
 256 grouped together, for example health-related questions/comments, testing-related
 257 questions/comments, and generic answers were first prepared using official sources such as
 258 official press releases, websites, policy reports. Using this information, we then tailored each
 259 response to the participant's individual question and/or comment. We were explicit about
 260 uncertainties where relevant. When providing information to the participants on the answering
 261 process (both at the beginning of the study, and at Phase Two of the study), we stated that our
 262 responses to their questions were provided from our position as social science researchers, not
 263 as specialists in this area – however we assured them that official and reliable sources were
 264 used for all answers and efforts were made to point the participant in the direction of these
 265 where applicable. We sent responses via e-mail to the participants on the 23rd and 24th of
 266 January, and they were invited to Phase Two of the study on the 25th January. We explained
 267 that feedback would not be provided to questions and comments made to the final content
 268 tester. We closed the study after Phase Two. We debriefed participants on the study and gave

each participant a €20 voucher to compensate them for the time they spent on the study. At all stages of the process, we provided a name and e-mail address of a research team member both in Ireland and in the UK for participants to contact should they have any concerns or queries on the study. All data collected was anonymised and treated confidentially, with access to the data restricted to the research team. Figure 1 provides a graphical representation of the VIZZATA™ process.

<Insert Figure 1 about here>

Analytic procedure

We downloaded all the data into a CSV file and used QSR International's NVivo 9 qualitative software to organise the data analysis. The dataset consisted of all questions and comments arising from the content testers and all replies to the open-ended questions (See Table 2). We adopted a qualitative inductive thematic analysis (Braun & Clarke, 2006), analysing all relevant extracts that we considered relevant to the research objectives. We developed a coding framework that we continuously developed, using a method of 'constant comparison' – emerging codes were compared with established codes to merge similar codes together. We merged codes to begin the process of identifying themes: themes that represented broad recurring patterns in the data. The research team discussed and refined these themes and adopted illustrative names and definitions for each of the themes.

<Insert Table 2 about here>

Findings

Our thematic analysis based on 60 coding categories enabled us to identify 5 overarching themes. These themes are illustrated in the thematic map in Figure 2, and reflect how consumers made sense of the incident by thinking about – and ascribing – blame, responsibility, and accountability to the various actors involved, and the function served by this reasoning. In the following sections, we discuss the themes with illustrative quotes from the participants. Next to each quote, in brackets, we report the nationality, gender and age-range of the participants.

<Insert Figure 2 about here>

Deliberately deceitful food industry

Participants made sense of the incident by speculating about the cause of the adulteration. Participants largely viewed the adulteration as having occurred as a result of direct actions of those in the food industry. On the whole, these attributions of causal responsibility were reflected as attributions of blame. These participants established this link by arguing that those involved in producing the food products had deliberately adulterated and mislabelled products, with clear intention that consumers would be misled and would purchase adulterated meat products. Thus participants argued that the addition of undeclared ingredients and the mislabelling of contents was seen as a *deliberate and deceitful* activity; their comments and questions spoke of ‘deceit’, ‘lies’ and ‘abuses’:

I am worried that different substances are being put into food, but it’s not being put on the packaging, so consumers can make an informed choice about whether to buy it or not. It’s a very deceitful practice. (UK, Female, 31-35)

Participants were concerned about how widespread these deceitful practices might be in the food industry, reinforcing their suspicion that there had been sustained and deliberate food

fraud that had been covered up by the food industry and that the horse-meat scandal was not one-off accidental contamination. Imagining such ‘worst case scenarios’ enabled them to express how their confidence in the food industry had been significantly undermined:

What is the possibility of similar adulteration in other meat products or even wider food categories? How long have we been consuming such adulterated meat? (Ireland, Female, 31-35)

Most participants saw deceit as part of the food industries collective culture. However, some participants did highlight the role of specific individuals and organisations within the food industry. A number of participants argued that within an organisation, blame should not be distributed equally, as they felt it was often the case that these acts of deceit were perpetrated by those at the managerial level whilst workers on the ground were unwitting accomplices:

Cut out the ‘skulduggery’ and deception, it is sad to see 150 job losses to innocent people, this is the fault of management not doing their job properly and ensuring a ‘clean’ product be sold for human consumption, why did the meat processing plants jeopardise these jobs? I feel they all thought they could get away with it. (Ireland, Female, 51+)

A small number of participants speculated that the contamination may have resulted from a technical or systems error. Amongst this minority, although there were judgements of causal responsibility, there was a distinct absence of any moral judgement of deliberate or intentional fault and they tended not to attribute blame. These judgements appeared to focus on the fact that, at this early stage, the majority of the contamination was found to be trace amounts. These participants also tended to be more inquisitive and speculative than other participants, suggesting that they were still trying to make sense of what had happened, not ruling out any of the possible causes:

Could the DNA be there because machinery has not been cleaned correctly between the different uses of the meat? For example, making dog or cat food, and then making burgers. (UK, Female, 36-40)

Complexity of food systems

Most participants felt that the direct causal actions of the primary perpetrators – individuals and organisations in the food industry – had been facilitated by the complexity of the food processing system and the actions (and inactions) of a range of individuals and organisation operating in it. They felt that inadequate monitoring and testing processes enabled the adulteration to occur and go undetected for a long period of time. Many participants questioned why quality control tests had not identified the contamination prior to the products reaching the market:

How good than are the tests and checks, which should be carried out, at the production stage? Should this not have been found before the product reached the point of sale? (UK, Female, 51+)

Participants viewed those individuals and organisations who were responsible for overseeing and monitoring the safety and quality of the food supply as having indirectly contributed to the occurrence of the adulteration, primarily by their *lack* of action. There was a sense that these actors, including retailers, the food industry, and authorities, had been ‘asleep on the job’ and had failed in their obligations and duties such as adequately testing and checking the ingredients and products. Some participants voiced concern that retailers were not carrying out satisfactory quality control checks on their suppliers. Participants considered it to be the responsibility of retailers to detect contaminated products before they reached their shelves:

It's all very well for [the supermarket] to be doing an investigation now. They should be making routine checks on their suppliers, to ensure the safety and integrity of our food. (Ireland, Male, 41-50)

Participants also criticised the quality control systems and monitoring processes of the authorities and regulatory bodies which had failed to identify the adulteration. Participants argued that the regulatory agencies and their staff were put in place to detect and prevent fraudulent activity but were obviously not fit for purpose:

The department have vets and checks in place in factories. Why did they not find out the make-up of the imported product before it hit the food chain. (Ireland, Female, 51+)

In considering the complexity of the food system, participants reflected on the wider political, social, and economic processes which had facilitated the food industry's adulteration activities. For example, a number of participants acknowledged a complex backdrop of the economic downturn, austerity programmes, and political reorganisation of various regulatory bodies:

Is it because of repeated Government cuts, that the FSA (Food Standards Agency) were unable to find the adulteration of some 'Beefburgers'. Have staffing and funding levels been reduced to the point where contamination of foodstuffs will go undetected? (UK, Male, 51+)

Other participants viewed cost-cutting and profit-making measures as motivators for the illicit actions in the food industry. Some felt that it was retailers' pressure on producers to supply product at competitive prices that led them to cut corners:

My main issue is the large supermarkets push the producers and suppliers to reduce their costs and prices to gain lower pricing on the shelves. What is worrying is there seems to be little concern for quality of these products. (Ireland, Male, 41-50)

The participants felt the regulatory agencies and their staff were only indirectly causally responsible for the incident, and a blame discourse in discussions of the actions (or lack of actions) of these actors was notably absent. There was no indication that the participants believed that the regulatory agencies and their staff had *deliberately* neglected to carry out adequate testing or colluded with the food industry to bring about the adulteration. Whilst participants did not blame them they still made moral judgements about the regulatory agencies and their staff holding them responsible for failing to stop the adulteration.

Consumer demand

A substantial minority of participants argued that consumers, though not themselves, had to bear some of the responsibility, albeit, the tone was less accusing than in previous themes discussing causal responsibility. The act of directing responsibility to other consumers appeared to be less about seeking accountability and retribution; rather, it functioned as a way for individuals to distance themselves from the threat and maintain confidence in the food system and in their own judgement and food choices. Some participants argued that consumer demand for cheap produce was a contributing factor in the breakdown of aspects of the food system:

People should understand if they want cheap food products things like this are bound to happen. (UK, Male, 51+)

Thus blaming other consumers was a way for some participants to distance *themselves* from any personal moral responsibility. They stated that they ‘knew better’ than to buy cheap processed food products:

I've never really had any confidence in processed pre-packaged foods. It makes me feel that cooking everything from scratch has definitely been the right choice. (UK, Female, 25-30)

However, a small number of participants noted that some consumers struggle financially and have no option but to purchase value-range products however they felt this did not absolve food manufacturers, supermarkets and regulators for ensuring that such cheap food was safe.

Some of us cannot afford to buy all fresh products and processed meats are a cheap way to feed a family. But you should still expect (some quality) in the item. It's wrong to suggest otherwise. (Ireland, Female, 41-50)

The need for accountability

The participants in our study stated that those in the food system (including the food producers, retailers, and government or regulatory figures) who they identified as having causally contributed to the occurrence of the horsemeat incident should be held to account for their (in)actions. The participants described accountability as much more than just having been responsible for the incident's occurrence; there was a sense that there should be consequences if things went wrong. Participants viewed these actors as duty-bound to be liable, or answerable, to the consumer when things went wrong (Schafer, 1999; Schlenker et al., 1994). Demanding that these actors be held accountable illustrates how the participants expected them to be answerable for their role in causing, facilitating or permitting food adulteration, to account for what they did or failed to do, to fix the problem, and if necessary, face sanctions and make apologies and reparations:

I think that this should be a sign for food companies to clean up their act...I also think that government deterrents and huge fines should be put in place for every part of the food chain to make everyone responsible for their actions. (UK, Male, 41-50)

The participants appeared to link their reasoning on the causal role different actors had played in the horsemeat incident and their views on the manner in which these actors should be held

accountable. For those in the food industry who they judged as having been directly responsible for the food adulteration and who they argued were both responsible and blameworthy, participants called for fines, sanctions, and criminal prosecutions:

People like him (named food producer) should be banned for life from having anything to do with food processing as he can't be trusted to obey rules regulations, or laws. The management of these companies found to be involved should be charged with a crime. (Ireland, Female, 51+)

Participants also argued that regulators who had failed to prevent food adulteration should be accountable. Participants called for them to take action to 'fix' the processes which had facilitated and indirectly caused the adulteration, that is inadequate testing and monitoring conditions:

I think the inspection process along the whole food chain of these products should be reviewed to ensure the public that measures are being taken and these measures should be published. (UK, Male, 41-50)

Participants' views that individuals and organisations be accountable through visible and specific acts such as closing factories, paying fines, issuing reports, was a way in which they could voice their concern and emphasise the seriousness of the situation. It was a way in which participants could make sense of a complex situation in which there were uncertainties about how adulteration had happened and who was at fault.

Restoration of confidence

For many participants, the confidence they had previously had in the processed meat sector had been undermined. Most participants expressed a strong sense of disgust, moral outrage, and betrayal at the thought that horse meat (traditionally not a food animal in these cultures) had entered the food chain. Indeed all the participants accepted that this adulteration was a 'crisis'

or ‘scandal’ even though there was no direct threat to public health. Participants felt they had the right to expect and be confident that a purchased food product lived up to their expectations of quality and safety:

If these products were labelled "Horse meat burgers" that would be fine but as they are ‘Beefburgers’ we have the right to expect that they are made from beef.

(UK, Male, 51+)

The horsemeat incident forced participants to reconsider and reflect on their confidence in the ‘purity’ of food. Their search for accountability, blame and punishment reflected their desire to have their confidence restored. For participants there was a sense that holding individuals or groups accountable enabled them to believe that such incidents could and would be prevented:

I think they (the authorities) need to assure the public that they are determined to stamp this out for once and for all and that someone shall be held responsible, then follow through and bring criminal charge so to ensure that this shall never happen again. (Ireland, Female, 51+)

Furthermore participants’ willingness to have their confidence restored by appropriate actions by those responsible was reflected in their praise for individuals and organisations who had at an early stage publically accepted responsibility and apologised for the adulteration. Most of the participants praised a supermarket’s decision to run a full page newspaper advertisement in which the supermarket admitted and apologised for its role in the adulteration (this advertisement was used as content tester 4 in VIZZATATM). The participants did not feel that the apology absolved the supermarket from responsibility for the adulteration, they noted that the supermarket had facilitated it through inadequate checking and testing. However most of the participants accepted this admission increased their confidence in the food products sold by the supermarket:

488 It does seem that [the supermarket] are determined to do right by their
 489 customers, and are taking responsibility for their part in this fiasco, this will
 490 inspire confidence in their integrity to supply authentic products. (Ireland,
 491 Female, 51+)

492 Participants' appraisal of the role of the individuals and organisations in the scandal seemed to
 493 be as much influenced by the ways in which these individuals and organisation responded to
 494 the evidence of contamination as to their actual role in causing it. Most participants felt that
 495 the response had been prompt and investigations underway quickly, although a small number
 496 did query and criticise the decision of the Irish authorities to delay initial test results available
 497 in December. That said, many participants praised the Food Safety Authority of Ireland for
 498 detecting the adulteration as part of their routine testing and successfully carrying out its
 499 commitment to monitor the quality of the Irish food chain. For participants this evidence that
 500 there was a vigilant organisation provided a basis of confidence that it could prevent such
 501 adulteration happening again:

502 ...granted it will question traceability but at least they started dealing with it
 503 immediately and wasn't it great that they were doing their jobs by testing the
 504 meat! The fact it was traced in Ireland should mean that we still take pride in
 505 our exports and take responsibility should something go wrong. (Ireland,
 506 Female, 25-30)

507 Participants especially in Ireland felt that the government had responded quickly and positively
 508 to the adulteration. However participants qualified their support for actions by the government
 509 and government agency noting that it was important that they should sustain their vigilance
 510 and should ensure the perpetrators were identified and punished:

511 It has been well managed by Simon Coveney [Irish Minister of Agriculture]
 512 taking responsibility and making it public, thereby instilling confidence that he

is determined to 'root out' the wrongdoings and get to the truth of this matter,
 this does give hope that his intention is for transparency , let's hope there shall
 be accountability. (Ireland, Female, 51+)

Discussion

Concepts of responsibility, blame and accountability are particularly relevant in a crisis as such situations generally present a threat to consumer confidence. However, previous researchers have raised concerns regarding the uncritical treatment which these related, but independent, concepts have received (Bickerstaff et al., 2006). In this article and in line with previous theoretical thinking, we were able to access data from individuals during the early stage of the horsemeat scandal that provided insight into the ways in which members of the public used concepts such as responsibility, blame and accountability. Participants in our study divided causal responsibility for the adulteration amongst blameworthy perpetrators, the food producing industry, and unwitting accomplices such as the individuals and agencies responsible for testing and monitoring the food chain including retailers and authorities. For participants blame functioned as an added layer to attributions of causal responsibility, and in line with previous conceptualisations of this concept (Bickerstaff & Walker, 2002; Uzzell et al., 2012), was directed only at individuals and organisations in the food industry that were viewed to have acted intentionally. For participants accountability was a process in which individuals and organisations who contributed to the occurrence of the adulteration were held accountable – with the expectation that there would be consequences in the form of reparations, penalties, or sanctions. Enhancing understanding of *how* and *why* consumers attribute responsibility in a food incident is a valuable activity as it increases our understanding of the triggers of public disquiet and the actions which members of the public value in addressing the

incident and can have direct implications for improving communication strategies in times of crisis.

However it is important to note that some participants felt that some consumers should bear some responsibility for the adulteration, because they wanted ‘cheap’ produce. This ‘othering’ of blame is not uncommon: ‘victim blaming’ can act as a protective device by which individuals can distance themselves and their own group who behave reasonably and responsibly, in this case by buying more expensive and safe food, from others whose irresponsible actions are a threat, in this case buying cheap contaminated food (Mayor et al., 2013; Napier, Mandisodza, Anderson, & Jost, 2006). In our study, consumers may have been maintaining their faith in the food system by engaging in othering and blaming other consumers. This links in with the work of Douglas (1992), who described how individuals or groups will respond to a risk by allocating blame in a way that protects their own value positions. However, this was clearly a contentious issue as a number of the participants in the current study argued that quality should not have been compromised irrespective of price, a sentiment also echoed by many consumer bodies and authorities as the incident progressed in the subsequent months.

Our research adds to existing knowledge on restoring confidence in the aftermath of a crisis. When there is a failure in the normal operations of the food chain, holding individuals and organisation accountable is a vital activity in order to minimise impacts on confidence and begin the process of rebuilding confidence (Driedger et al., 2013). People can only place faith in a system when they perceive those who are operating the system are committed to the general good, in this case safe food, not in pursuing their own self-interest, minimising costs by contaminating or adulterating food. The food production processes are not transparent to consumers, and consumers can only rely on labels, food quality assurance schemes, brands, retailers, and even price, as indicators of authenticity, purity and quality (Eden et al., 2008;

Van Wezemael, Verbeke, Kugler, de Barcellos, & Grunert, 2010; Verbeke et al., 2010). Accountability within the food processing sector is vital as it allows consumers place confidence in a system that is otherwise opaque to them.

The participants in our study wanted to ensure that accountability was enforced through penalties, fines, and sanctions and that these served as visible indicators that reparation had been made and that confidence was possible again. However, accountability of this form in the immediate aftermath of a food crisis is difficult to enforce. As noted by a report from the UK's National Audit Office which scrutinises public expenditure on behalf of the UK's Parliament: 'six months on, inquiries are still ongoing and the original source of the adulteration has not been identified' (Morse, 2013). Establishing and enacting accountability is a slow but vital process. Thus, 'accountability mechanisms' such as ensuring a transparent communication strategy and informing the public regularly are often put in place in the wake of a crisis to enhance confidence (Driedger et al., 2013). To rebuild confidence, it is vital that efforts should be made to communicate and engage with the public to keep them updated and informed on all efforts being employed to identify those responsible and to hold them accountable. This may go a long way to rebuilding confidence in the food supply chain, thus allowing consumers to resume their routine habitual eating activities, with no concern for risk.

Further evidence of the participants' desire to restore confidence in the food system was their willingness to praise those individuals and organisations that they judged to have been accountable during the crisis. Our findings indicate that individuals *want* to have faith in food systems and those involved in it – and they seek good reason to do so. Organisational responses to crisis situations can determine the extent to which the public will hold the organisation responsible for contributing to or exacerbating the problem, and the degree to which confidence in the organisations might be impacted on as a result (Driedger et al., 2013). In the current study, the supermarket was appraised positively in light of its decision to hold itself accountable

for its role in the incident by issuing an apology to its consumers. Although participants did not absolve the retailer of responsibility for their alleged role in facilitating the adulteration, such apologies were welcomed and could go some way to restoring the reputation of those that made them. There is similarity here to the crisis response strategy of Maple Leaf Foods which had marketed contaminated food during a deadly 2008 listeriosis outbreak in Canada. During the crisis, Maple Leaf Foods opted for a strategy of high visibility: rather than avoiding or displacing blame, they chose to accept full responsibility for the contamination and issued a public apology to all those affected, which attracted universal praise (Driedger et al., 2013; Greenberg & Elliot, 2009). The current study adds to this literature by providing direct empirical evidence that in the midst of an on-going food crisis, consumers positively appraised communications which accepted, rather than shirked, responsibility. In crisis those involved tend to try and deny any responsibility or blame (Greenberg & Elliot, 2009; Moynihan, 2012). There are clear insights from the current study for organisations developing communication strategies in response to attributions of blame or responsibility. Acceptance of moral responsibility from the perspective of the consumer is a compelling indication that confidence can be restored (Greenberg & Elliot, 2009). For an organisation, early understanding of whether, why and how they are being blamed or held responsible for a crisis event is important, and this information should inform the development of effective communication strategies that support endeavours to mitigate negative consequences on confidence or reputation.

VIZZATATM facilitates qualitative enquiry by allowing participants to express directly their thoughts and to ask questions. The distinctive features of VIZZATATM are the eliciting of participants' questions, and their engagement in a dialogue with the research team (whereby participants' receive responses to their questions). In this sense, VIZZATATM has advantages over commercially available survey tools, and at the same time it is more cost-effective and easier to implement than focus groups. Asking questions requires engagement and

consideration of the material at hand, it reveals how participants are making sense of new information, and it can reveal uncertainties and concerns that the participant may have regarding the provided information (Dillon, 1982; Marcu et al., 2014; Rutsaert et al., 2015). We investigated public perceptions when the issue was new and unfolding, and thus, it could be expected that people had many unanswered questions – our study enabled us to find out what these questions were. The anticipated provision of individually-tailored answers encourages the participants to attend to the object of investigation (in our case, the horsemeat adulteration incident) in the interval between leaving comments and questions and receiving response, and thus it encourages the participants to engage more deeply with the topic of the study.

Conclusion

In this article we have examined how participants in our research study constructed and used responsibility, blame, and accountability in the aftermath of a food adulteration incident. Our findings reinforce the centrality of blaming as a response to disaster and risk within society (Douglas, 1992; Green, 1999). The horsemeat adulteration incident is interesting in the respect that no immediate danger was posed to health, and indeed health concerns were not the major priority of our participants; still, in our study blaming represented a major response of the participants. Our findings indicate that one societal function of attributing blame in response to a disaster is to begin the process of restoring faith when confidence is broken, as when consumers are misled about the food that they purchase and consume. Consumers did not engage in a simplified process of blaming, but rather constructed hypotheses about who was responsible and why, and concluded that no single factor was at fault here, but rather, a complex variety of factors had ultimately led to the culmination of the horsemeat adulteration incident in early 2013. Perhaps the most striking finding from this study is the willingness of

consumers to rebuild their confidence in the food system in the aftermath of an adulteration incident and processes of accountability appear to be the restoration method of choice.

References

Barnett, J., Fife-Schaw, C., Shepherd, R., Timotijevic, L., Fletcher, J., & Fletcher, D. (2008).

Online deliberative engagement: A pilot study *A report for the Wellcome Trust*.

London: The Wellcome Trust.

Benoit, W. L. (1995). *Accounts, excuses, and apologies: a theory of image restoration strategies*. Albany, NY: State University of New York Press.

Bickerstaff, K., Simmons, P., & Pidgeon, N. (2006). *Public perceptions of risk, science and governance: main findings of a qualitative study of six risk cases*. Working paper. Centre for Environmental Risk, University of East Anglia. Norwich.

Bickerstaff, K., & Walker, G. P. (2002). Risk, responsibility, and blame: an analysis of vocabularies of motive in air-pollution(ing) discourses. *Environment and Planning*, 34, 2175-2192.

Boin, A., Hart, A., McConnell, A., & Preston, T. (2010). Leadership style, crisis response and blame management: the case of Hurricane Katrina *Public Administration*, 88(3), 706-723.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

Busby, J. (2008). Analysing complicity in risk. *Risk Analysis*, 28(6), 1571-1582.

de Krom, M. P. M. M., & Mol, A. P. J. (2010). Food risks and consumer trust. Avian influenza and the knowing and non-knowing on UK shopping floors. *Appetite*, 55, 671-678.

- 661 Dillon, J. T. (1982). The effect of questions in education and other enterprises. *Journal of*
662 *Curriculum Studies*, 14(2), 127-152.
- 663 Douglas, M. (1992). *Risk and Blame: Essays in Cultural Theory*. London: Routledge.
- 664 Driedger, S. M., Mazur, C., & Mistry, B. (2013). The evolution of blame and trust: an
665 examination of a Canadian water contamination event. *Journal of Risk Research*,
666 17(7), 837-854.
- 667 Eden, S., Bear, C., & Walker, C. (2008). Understanding and (dis)trusting food assurance
668 schemes: Consumer confidence and the ‘knowledge fix’. *Journal of Rural Studies*, 24,
669 1-14.
- 670 Fischer, J. M., & Ravizza, M. (2000). *Responsibility and control: a theory of moral*
671 *responsibility*. Cambridge: Cambridge University Press.
- 672 Green, J. (1999). From accidents to risk: public health and preventable injury. *Health, Risk, &*
673 *Society*, 1(1), 25-39.
- 674 Greenberg, J., & Elliot, C. (2009). A Cold Cut Crisis: Listeriosis, Maple Leaf Foods, and the
675 Politics of Apology. *Canadian Journal of Communication*, 34(2), 189-204.
- 676 Grunert, K. G. (2002). Current issues in the understanding of consumer food choice. *Trends*
677 *in Food Science & Technology*, 13(8), 275-285.
- 678 Harricharan, M., Wills, J., Metzgar, E., de Looy, A., & Barnett, J. (2014). Dietitian
679 perceptions of low-calorie sweeteners. *European Journal of Public Health*. doi:
680 <http://www.ncbi.nlm.nih.gov/pubmed/25344963>
- 681 Houghton, J., Rowe, G., Frewer, L., Van Kleef, E., Chryssochoidis, G., Kehagia, O., . . .
682 Strada, A. (2008). The quality of food risk management in Europe: Perspectives and
683 priorities. *Food Policy*, 33, 13-26.

- 684 Irani, T., Sinclair, J., & O'Malley, M. (2002). The importance of being accountable: the
 685 relationship between perceptions of accountability, knowledge, and attitude toward
 686 plant genetic engineering. *Science Communication*, 23(3), 225-242.
- 687 Kasperson, R. E., Jhaveri, N., & Kasperson, J. X. (2001). Stigma and the social amplification
 688 of risk: Towards a framework of analysis. In J. Flynn, P. Slovic & Kunreuther (Eds.),
 689 *Risk, Media, and Stigma: Understanding Public Challenges to Modern Science and*
 690 *Technology* (pp. 9-27). London: Earthscan.
- 691 Kuttschreuter, M., Gutteling, J. M., & de Hond, M. (2011). Framing and tone-of-voice of
 692 disaster media coverage: The aftermath of the Enschede fireworks disaster in the
 693 Netherlands. *Health, Risk & Society*, 13(3), 201-220.
- 694 Lachlan, K., & Spence, P. R. (2010). Communicating risks: examining hazard and outrage in
 695 multiple contexts. *Risk Analysis*, 30(12), 1872-1886.
- 696 Marcu, A., Gaspar, R., Rutsaert, P., Seibt, B., Fletcher, D., Verbeke, W., & Barnett, J. (2014).
 697 Analogies, metaphors and wondering about the future: Lay sense-making around
 698 synthetic meat. *Public Understanding of Science*. doi: 10.1177/0963662514521106
- 699 Mayor, E., Eicher, V., Bangerter, A., Gilles, I., Clemence, A., & T, G. E. G. (2013). Dynamic
 700 social representations of the 2009 H1N1 pandemic: shifting patterns of sense-making
 701 and blame. *Public Understanding of Science*, 22(8), 1011-1024.
- 702 Morse, A. (2013). Food safety and authenticity in the processed meat supply chain. London:
 703 National Audit Office.
- 704 Moynihan, D. P. (2012). Extra-network oganizational reputation and blame avoidance in
 705 networks: The Hurricane Katrina example. *Governance: An International Journal of*
 706 *Policy, Administration, and Institutions*, 25(4), 567-588.

- 707 Napier, J. L., Mandisodza, A. N., Anderson, S. M., & Jost, J. T. (2006). System Justification
 708 in Responding to the Poor and Displaced in the Aftermath of Hurricane Katrina.
 709 *Analyses of Social Issues and Public Policy*, 6(1), 57-73.
- 710 Regan, A., Shan, L. C., McConnon, A., Marcu, A., Raats, M., Wall, P. G., & Barnett, J.
 711 (2014). Strategies for dismissing dietary risks: Insights from user-generated comments
 712 online. *Health, Risk & Society*, 16(4), 308-322.
- 713 Rowe, G., Hawkes, G., & Houghton, J. (2008). Initial UK public reaction to avian influenza:
 714 An analysis of opinions posted on the BBC website *Health, Risk, & Society*, 10(4),
 715 361-384.
- 716 Rutsaert, P., Barnett, J., Gaspar, R., Marcu, A., Pieniak, Z., Seibt, B., . . . Verbeke, W.
 717 (2015). Beyond information seeking: Consumers' online deliberation about the risks
 718 and benefits of red meat. *Food Quality and Preference*, 39, 191-201.
- 719 Schafer, A. (1999). A wink and a nod: a conceptual map of responsibility and accountability
 720 in bureaucratic organizations. *Canadian Public Administration*, 42(1), 5-25.
- 721 Schlenker, B. R., Britt, T. W., Pennington, J., Murphy, R., & Doherty, K. (1994). The
 722 Triangle Model of Responsibility *Psychological Review*, 101(4), 632-652.
- 723 Seeger, M. W. (2006). Best practices in crisis communication: an expert panel process.
 724 *Journal of Applied Communication Research* 34(5), 232-244.
- 725 Setbon, M., Raude, J., Fischler, C., & Flahault, A. (2005). Risk perception of the 'mad cow
 726 disease' in France: Determinants and consequences. *Risk Analysis*, 25(4), 813-826.
- 727 Spink J. & Moyer D. C. (2011). Defining the public health threat of food fraud. *Journal of*
 728 *Food Science*, 76, 157-163.
- 729 Uzzell, D., Vasileiou, K., Marcu, A., & Barnett, J. (2012). Whose Lyme is it anyway?
 730 Subject postitions and the construction of responsibility for managing the health risks
 731 from Lyme disease *Health & Place*, 18, 1101-1109.

- 732 Van Wezemael, L., Verbeke, W., Kugler, J. O., de Barcellos, M. D., & Grunert, K. G. (2010).
 733 European consumers and beef safety: perceptions, expectations and uncertainty
 734 reduction strategies *Food Control*, 21, 835-844.
- 735 Verbeke, W., Van Wezemael, L., De Barcellos, M. D., Kugler, J. O., Hocquette, J. F.,
 736 Ueland, O., & Grunert, K. G. (2010). European beef consumers' interest in a beef
 737 eating-quality guarantee: Insights from a qualitative study in four EU countries.
 738 *Appetite*, 54, 289-296.
- 739 Washer, P. (2006). Representations of mad cow disease. *Social Science & Medicine*, 62, 457-
 740 466.

741

742

Table 1. Profiles of participants per country

Participants' profiles	Ireland (<i>n</i> = 22)	UK (<i>n</i> = 22)
Females	16	12
Males	6	10
Age range		
25-30	1	3
31-35	4	4
36-40	2	2
41-50	8	5
51+	7	8
Consume red meat at least once a week	22	22
Consume beef burgers at least once a month	21	15
Are aware of the horsemeat adulteration incident	21	22
Shop regularly in at least one of the supermarkets affected by the pig and horse DNA incident	22	22

Table 2. Number of questions, comments, and replies to open-ended questions left by the 44 consumers in Phase One and Phase Two of the study

	Part One	Part Two	Total
Questions	135	9	141
Comments	157	47	204
Replies to open-ended questions	195	253	448

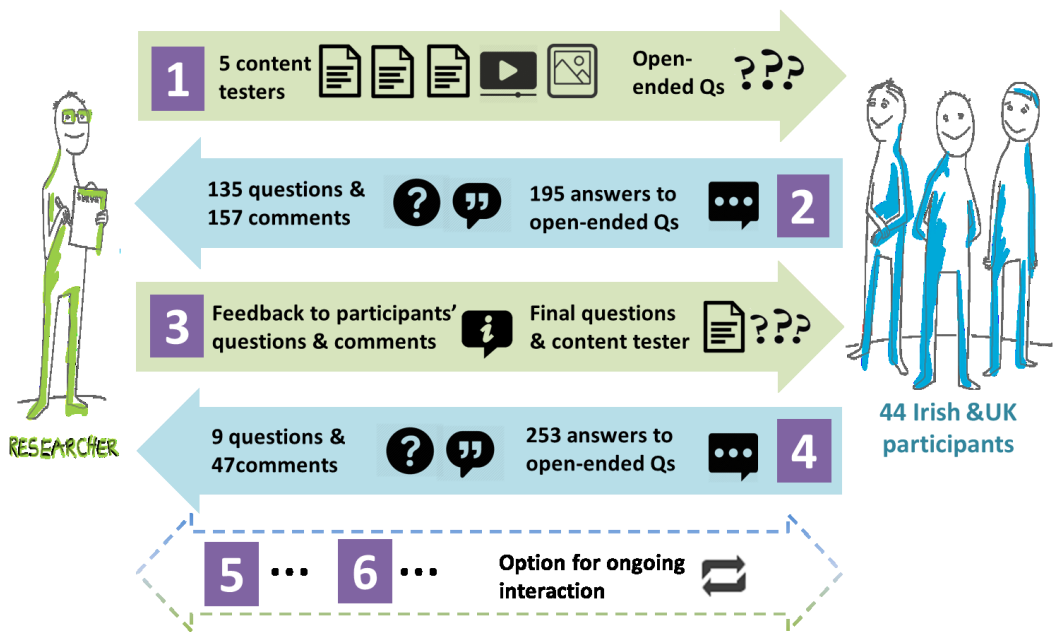


Figure 1. The VIZZATA™ process for the current study.

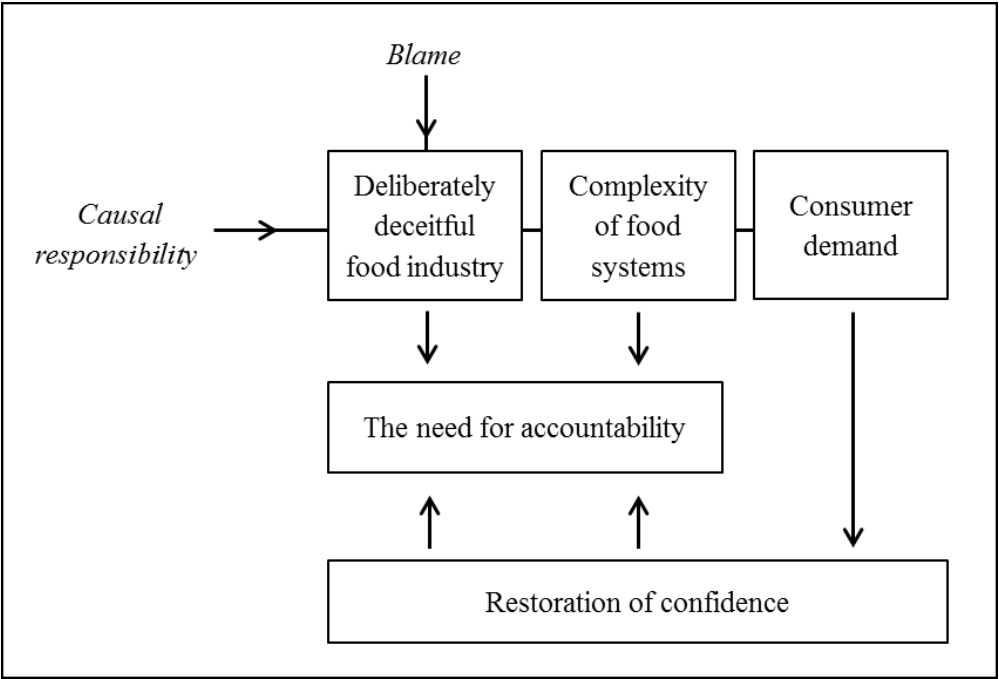


Figure 2. Thematic map reflecting how consumers constructed responsibility, blame, and accountability in the aftermath of the horsemeat adulteration incident.